

Project Operating Plan for Savannah River Site Liquid Waste Infrastructure Recovery Act Project

BACKGROUND

Recovery Act Project:	SRS Liquid Waste Tank Infrastructure Recovery Act Project
TAFS:	89-09/10-0253
Project Identification Code:	2002290
Recovery Act Bill Reference:	PL 111-5, Title IV – Energy and Water Development, Defense Environmental Cleanup (H.R. 1-26)
Project Cost:	\$200,000,000
Budget Authority:	06049, FD.05.31.00.0
Program Office:	Environmental Management
Recovery Program Plan:	EM - Defense
Management Office:	Jack Craig, Acting Manager, Savannah River Operations Office, jack.craig@emcbc.doe.gov, 803-952-6337 Rodrigo V. Rimando, Jr., SR Recovery Act Program Deputy Director, Savannah River Operations Office, rodrigo.rimando@srs.gov, 803-952-8647

LEADS

Implementation:	Savannah River Site
Breakthrough:	N/A
Laboratory:	N/A

I SUMMARY & OBJECTIVES

Summary

SR is responsible for managing the liquid radioactive waste stored in 49 underground tanks (two tanks have been previously closed). Of these tanks, 22 have non-compliant annulus containment and are exhibiting the effects of decades of storage of highly radioactive waste. Some of these tanks have been observed to have leak sites presenting potential for an insult to the environment. It is important that the radioactive waste be removed, treated, and disposed of into a more secure form before additional leaks occur and while tanks and infrastructure are in a condition to support these clean-up activities. The waste will continue to be safely stored until it is retrieved and disposed. Monitoring, surveillance, and maintenance activities are performed to validate safe storage conditions and tank integrity and to maintain the tank farms infrastructure so that it can be used for future waste removal, transfer and treatment activities.

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SR manages two liquid waste projects: the Radioactive Liquid Waste Stabilization and Disposition Project, PBS-0014C, and the Salt Waste Processing Facility (SWPF) line-item Project, 05-D-405. SR manages the liquid radioactive waste stored in Savannah River Site's underground storage tanks which includes designing and building systems to retrieve, transfer, treat, immobilize, and dispose of these wastes. The Liquid Waste Project (LWP) is responsible for the management, storage, transfer, treatment and disposal of the waste. This includes vitrification into a glass form of all sludge waste, treatment of salt waste on an interim basis until the SWPF project is commissioned, and final disposition of salt into a grout form after treatment. The SWPF Project is responsible for the design and construction of a plant which will treat the majority of the high curie salt waste.

When the SWPF becomes operational, the tank waste will be pumped via transfer lines to the SWPF for treatment. The resultant waste streams from SWPF will be transferred to the Saltstone facility and the Defense Waste Processing Facility (DWPF) for disposal into grout and glass forms, respectively. The Tank Farms provide waste delivery systems and supporting infrastructure.

Statement of Work

Recovery Act-funded investment in this project will upgrade the tank farm and support facility infrastructure required to provide the tank waste feed from the tank farms to the SWPF and to receive resultant treated waste streams from SWPF into Saltstone and DWPF for treatment and disposal. SWPF is scheduled to begin hot operations in FY2013. This investment will also perform various activities in preparation for tank closure.

More specifically, this focus on waste feed readiness includes:

- The replacement and/or refurbishment of aging tank farm infrastructure (systems and equipment).
- Continuation of sludge waste processing preparations and infrastructure installations that will reduce the sludge curies stored in tanks with non-compliant annulus containment thereby reducing environmental risk and accelerating tank closures.
- Tank waste chemical additions, mixing, sampling and transfer systems to ensure consistent waste feed to SWPF and waste product from SWPF meet strict waste feed acceptance criteria governing radioactive waste processing.

Further, the Recovery Act DWPF and Tank Farm infrastructure replacements and refurbishments include:

- DWPF and Tank Farms projects to replace equipment and systems that have reached expected service life and are at risk of causing lengthy and disruptive unplanned outages of sludge processing. Failure to remove the sludge from tanks impedes the ability to access the salt waste and prepare it for SWPF processing. An example of degraded infrastructure in DWPF to be replaced by the Recovery

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Act is the inert gas Argon tank and supporting process instrumentation. An example of degraded infrastructure in the Tank Farm to be replaced by the Recovery Act is the refurbishment of a tank purge ventilation system.

- Infrastructure activities that will assure environmentally sound operation of Saltstone vaults in support of SWPF decontaminated salt solution receipts.
- Replacement and refurbishment of two tanks to enable final tank cleaning prior to tank closure.

Recovery Act projects for Salt Waste feed preparation, delivery, receipt and treatment of SWPF output streams include;

- Chemical addition system design and installation, and waste transfer systems design for waste transfer between the Tank Farms, DWPF, Saltstone and SWPF.
- Radiation shielding for Tank waste processing.
- Fabrication and delivery of mixer pumps.
- Additional receipt and feed capacity at Saltstone for SWPF decontaminated salt solution.
- Modification of an existing high level waste tank to prepare it as an SWPF feed preparation tank in the Tank Farms.
- Fabrication of a higher capacity Nitrogen tank in support of nuclear safety system controls at DWPF to process the high curie effluent stream from SWPF.

Recovery Act projects that prepare for sludge removal and disposition include:

- Modification of the DWPF primary vitrification melter vessel and support equipment to increase glass throughput.
- Modification of a sludge storage tank in H Tank Farm to accelerate sludge retrieval and thereby reducing risk.

Recovery Act projects that prepare for tank farm closure activities include:

- Disconnection of systems and services, demolition and removal of attached structures and interferences, accomplishment of other activities to physically isolate tanks from the liquid waste system
- Infrastructure modifications in preparation for sludge and salt retrieval
- Acquisition of spare common tank closure equipment

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Changes during Final Scope Definitization

The initial SRS Liquid Waste Operations ARRA Project Operating Plan (SRS LW POP) approved in September 2009 included 27 Projects. The June 2010 revision of the SRS LW POP incorporates two primary changes from the initial SRS LW POP. The first change involves realignment of scope based on priority. The second change is the identification of work that could be performed with funds made available from cost under-runs on existing work and from the release of contingency funds no longer need because risk events did not occur or whose impacts were mitigated.

In November 2009, 17 RA projects were curtailed and 17 new projects (scope from the “Base” Contract scheduled for FY10) were added. This work is listed below.

Curtailed Projects (17)

- 1.1 Saltstone Accountability
- 1.2 Vault 4 Drainage
- 2.2 Tank 51 Pumps Procurement
- 2.3 Install Tank 51 Pump
- 3.1 DWPF Cooling Tower
- 3.3 DWPF Safety Computer
- 3.4 DWPF Zone 2 Ventilation
- 3.5 DWPF Electromechanical Manipulators
- 3.6 DWPF Melter Bellows
- 4.1 HTF Safety Computer (CRC)
- 4.2 Replace Steam Piping
- 4.3 Replace CCW Piping
- 4.4 Replace WW Piping
- 4.5 Replace IA/PA Piping
- 4.6 2H/2F Evaporator Lines
- 5.1 Saltstone Reliability Upgrades
- 5.2 Saltstone Replacement Equipment

Realigned Projects (17)

- 7.1 Tank 18 Physical Isolation Activities
- 7.2 Tank 19 Physical Isolation Activities
- 7.3 Tank 4 Infrastructure Modifications
- 7.4 Tank 5 Infrastructure Preparations

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- 7.5 Tank 6 Infrastructure Preparations
- 7.6 Procure Common Tank Closure Equipment
- 8.1 Tank 12 Infrastructure Modifications
 - 8.2a Tank 28 Infrastructure Modifications
 - 8.2b Tank 37 Infrastructure Modifications
 - 8.2c Tank 42 Infrastructure Modifications
- 9.1 SDI Saltstone Tank 50 Return to Service
- 9.2 SDI Blend & Feed Tanks
- 9.3 SDI DWPF Modifications
- 9.4 SDI ETP Tank 50 Return to Service
- 9.5 DWPF SAS Recycle Reduction
- 10.1 Vault 2 Services & Organic Modifications
- 11.1 Melter 4 Procurements
 - 11.2a DWPF Dry Frit Addition
 - 11.2b DWPF Water Separation from Decon Frit
- 12.1 Enhanced Chemical Cleaning (ECC) system and infrastructure upgrades

The Recovery Act projects and end-state milestones are outlined in greater detail in Table 4 - Major Project-Specific Milestones, Table 6 – Project Performance Measures, and Table 7- Project Performance Targets in this plan.

Buy Back Work Scope:

Based on the potential availability of funds from unused management reserve and contingency funds and from cost efficiencies in executing the planned projects, additional candidate projects have been identified should funding become available.

In April 2010, an opportunity was recognized that new scope could potentially be accomplished within the original funding due to (a) realization of cost under-runs because of the lowering of the FY10/FY11 pension/legacy medical cost and (b) realization of cost under-runs of the approved projects due to good performance. New scope entitled “buy-back” scope was added and was comprised of scope from the “Base” Contract scheduled for FY11 and some previously curtailed RA Projects. The total cost of the buy-back scope was qualitatively assessed to be much greater than the potential cost under-runs. The strategy was to have approved “buy-back” scope available to be added via change control as under-runs were realized. The “buy-back” scope is shown in the tables below.

Priority buy-back scope items that will be considered for RA funding due to the lowering of the FY10/FY11 pension/legacy medical cost are as follows:

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Priority Buy-back Scope Items

Contract Mod ID	Project Title	Performance Measures
7.7	Chemical Cleaning Infrastructure Unit 1 Train 1 Design	Perform design, place long-lead procurements, and authorize fabrication for Unit 1, Train 1
7.8	Chemical Cleaning Infrastructure F Area Balance of Plant Design	Perform design for chemical cleaning infrastructure improvements for first F Area tank balance of plant. Initiate long-lead procurements, site preparation, and disassembly and removal.
7.9	Chemical Cleaning Infrastructure Unit 2 Design	Perform design for chemical cleaning infrastructure for Unit 2. Initiate long-lead procurements.
7.10	Chemical Cleaning Infrastructure H Area Balance of Plant Design	Perform design for chemical cleaning infrastructure improvements for first H Area tank balance of plant. Initiate long-lead procurements, site preparation, and disassembly and removal.
12.1	Enhanced Chemical Cleaning (ECC) Testing and Revised Conceptual Design	Complete Real Waste Test. Complete Hazardous Simulant Test. Complete ECC Unit 2 and first H Area tank conceptual design. Perform chemical cleaning testing.

Other Potential Buy-back Scope Items

Contract Mod ID	Project Title	Performance Measures
1.1	Saltstone Accountability	Design, procure, and install accountability system.
1.2	Saltstone Vault 4 Drainage	Install system to divert surface water for sufficient drainage.
1.3	Saltstone Support Building	Design and initiate construction of a support facility for Saltstone.
2.2	Purchase Replacement Mixer Pumps	Procurement and fabrication of four quad volute pumps.
2.5a	Blend Tank Chemical Addition	Install piping to a second tank.
3.1	Refurbish Cooling Tower	Procure and install cooling tower.
3.3	DWPF Safety Computer Control Systems	Upgrade DeltaV computers/servers to version 10.3.
3.5	Purchase Manipulators	Procurement and fabrication of two electro-mechanical manipulators.
3.6	Purchase Melter Bellows	Procure bellows.

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Other Potential Buy-back Scope Items

Contract Mod ID	Project Title	Performance Measures
4.1	Tank Farm Safety Computer Upgrades	Procure control room hardware, equipment, and DeltaV software. Initiate control room modifications.
4.2	Replace Steam Piping	Issue design and initiate construction.
4.5	Replace Plant Air and Instrument Air Piping	Issue design and initiate construction.
5.2	Saltstone Replacement Equipment	Procure Saltstone facility air compressor, mixers, vault cameras, and grout pump systems.
6.3a	DWPF Spare Equipment	Procure lab waste transfer drawer. Procure spare PRFT and SEFT transfer pumps. Procure Canberra Argos 5 AB contamination monitors.
7.6	Award Procurements for Common Tank Closure Equipment	Procure submersible mixing pump.
8.2a	Tank 28 Infrastructure Modifications	Tank 28 modifications complete.
8.2b	Tank 37 Infrastructure Modifications	Tank 37 modifications complete.
8.2c	Tank 42 Infrastructure Modifications	Initiate installation and procurements of pumps.
9.1	SDI SPF Tank 50 RTS	Complete Balance of Plant construction and startup.
9.2	SDI Blend and Feed Tanks	Complete design for Tanks 2 and 3. Start design for Tank 4. Start construction for Tanks 1 and 2 and electrical systems. Initiate procurement and fabrication of three tank samplers.
9.3	SDI DWPF Mods	Continue design. Initiate long-lead procurements and initiate construction.
9.4	SDI ETP Tank 50 RTS	Complete Balance of Plant construction. Complete startup and initiate readiness assessment.
9.5	SAS Recycle Reduction Mods	Complete outage tie-ins, startup, and ready to operate.
10.1	Vault 2 Services and Organic Mods	Complete design for Vault services and organic mods and initiate construction.
11.1	Melter #4 Procurements	Complete vessel/frame. Initiate refractory installation.
11.2a	DWPF Enhancements – Dry Frit Addition	Complete design and initiate long-lead procurements.

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Other Potential Buy-back Scope Items

Contract Mod ID	Project Title	Performance Measures
11.2b	DWPF Enhancements – Water Separation from Decon Frit	Complete design and initiate long-lead procurements.

Recovery Act Objectives

The planning, execution and closeout of this Recovery Act Project will contribute to the Savannah River Recovery Act Program goal of saving and creating a total of 3,000 jobs. Hiring preference is given to the Central Savannah River Area and SC counties adjacent to SRS, including Barnwell County, Allendale County, and Orangeburg County. The nature of the work of this Recovery Act Project allow for the hiring of a wide range of skills and trades.

Programmatic Objectives

This Recovery Act work ties to the following DOE and EM Strategic Goals and Themes:

- DOE Strategic Goal/Theme 4 –Environmental Responsibility – Protecting the environment by providing a responsible resolution to the environmental legacy of nuclear weapons production.
- DOE Strategic Goal/Theme 5 – Management Excellence – Enabling the Department’s mission through sound management and business practices.
- EM Goals – To safely disposition large volumes of nuclear waste; safeguard materials that could be used in nuclear weapons; deactivate and decommission thousands of contaminated facilities no longer needed by the Department to carry on its current mission; EM is fulfilling its commitments to reduce overall risk and complete cleanup across all sites for generations to come.

Public Benefits

The Savannah River Office will use Recovery Act funds to refurbish existing infrastructure and systems, and provide new infrastructure to transfer and treat radioactive liquid waste from aging underground tanks. Replacement of some of the existing infrastructure and SWPF Feed/Product Delivery activities was originally scheduled to take place in 2011-2013. Accelerating this work into the FY 2010 and FY 2011 timeframe reduces programmatic risk through early completion.

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Recovery Act Project Impacts

Investment in this project will upgrade the tank farm and support facility infrastructure necessary to provide the tank waste feed from the tank farms to the SWPF and be staged to receive and treat the effluent streams from SWPF, which is scheduled to begin hot operations in FY2013.

The Recovery Act investment accelerates the projects necessary to support the start-up and efficient operations of SWPF. Efficient operation of the SWPF reduces the liquid waste life-cycle costs.

The original scope and purpose of the existing contract will not change with the addition of the Recovery Act funding. The purpose of this contract remains to furnish safe, compliant, cost-effective, and energy-efficient services to further the DOE-SR mission to store, retrieve, and treat Savannah River tank waste, store and dispose of treated waste and to close the Tank Farm waste management areas in order to meet Federal Facilities Agreement commitments. It remains the Liquid Waste contractor's responsibility to determine the specific methods and approaches for accomplishing the agreed upon work scope. The Savannah River Liquid Waste contract applies performance-based contracting approaches, thereby expecting the contractor to innovate and implement techniques that maximize performance efficiencies and scope completion.

II COST & SCHEDULE

Budget

Table 1. Budget Implementation Monthly & Yearly Obligations

The Project funding is subject to re-apportionment and will be finalized by 9/30/2010; the Project Operating Plan will then be reissued with an obligations table.

Table 2. Budget Implementation Monthly & Yearly Expenditures

The Project funding is subject to re-apportionment and will be finalized by 9/30/2010; the Project Operating Plan will then be reissued with a costs table.

Table 3. Funds Returned and Offsetting Collections (\$M)

Provide description and amounts for Funds	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
Returned and Offsetting Collections	NA						

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Indirect Costs

In accordance with the Liquid Waste Contractor's current contract, all costs are directly tied to the project. A determination of possible increases, if any, in indirect costs will be made when the project baseline is developed.

Changes to Baseline Budgets (\$M)

Not applicable

Milestones (Recovery Act Baselines)

The following is the summary of the project end-state and interim milestones for the work scope to be completed using RA funding.

The milestones and performance measures provided in Tables 4, 6, and 7 are based on the best available information about ARRA requirements and pre-work authorization project definitions. Estimates have been developed for costs and the associated end-state and interim milestones and associated performance measures. It is expected that as the detailed estimates and resource-loaded schedules are finalized, there will be some change to these estimates for costs, milestones and performance measures.

The internal DOE-approved change control process will be applied to the RA-funded scope. It is assumed that there will also be a future DOE-HQ change control process associated with costs, milestones and performance measures that have been reported to date and included in this plan.

Table 4. Major Project-Specific Milestones for Active Projects

	Title/Description	Date
Project RA End State	1.0 Safety Improvements	
Sub Project RA End State	1.1 Saltstone Accountability – Design, procure and install accountability system	Sep-11
Sub Project RA End State	1.2 Saltstone Vault 4 Drainage – Install system to divert surface water for sufficient drainage for Vault 4	Sep-11
Project RA End State	2.0 SWPF Integration - Tank/Farm Infrastructure for Feed/Product Readiness	
Sub Project RA End State	2.1 Design and purchase salt blend mixer pumps	Sep-11
	2.1.1 Award procurement for mixer pumps	May-10
Sub Project RA End State	2.2 Purchase replacement mixer pumps – Procurement and fabrication of four quad volute pumps	Sep-11

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Table 4. Major Project-Specific Milestones for Active Projects

	Title/Description	Date
Sub Project RA End State	2.4 Radiation shielding for waste processing tank	Sep-11
	2.4.2 Receive equipment disposal box	Sept-10
Sub Project RA End State	2.5a Design and Install Chemical Addition and Transfer Process Piping – RA Blend Tanks Chemical Addition Piping	Sep-11
	2.5.1 Chemical addition design	Sep-10
Sub Project RA End State	2.5b Design and Install Chemical Addition and Transfer Process Piping – RA SDI SWPF Transfer Line Tie-Ins	Sep-11
Sub Project RA End State	2.6 Enhance Saltstone facility waste feed storage capability	Sep-11
	2.6.2 Award procurement for new receipt tank	Jun-10
Sub Project RA End State	2.7 Increase Nitrogen Tank Capacity at DWPF	Sep-11
	2.7.2 Award procurement for new tank	Aug-10
	2.7.4 Tank pad installed	Jun-11
Project RA End State	3.0 DWPF Infrastructure	
Sub Project RA End State	3.1 Refurbish Cooling Tower – Procure and install cooling tower -	Sep-11
Sub Project RA End State	3.2 Replace Argon Tank	Sep-11
Sub Project RA End State	3.5 Purchase Manipulators – Procurement and fabrication of two electro-mechanical manipulators	Sep-11
Sub Project RA End State	3.6 Purchase Melter Bellows – Procure bellows	Sep-11
Project RA End State	4.0 Tank Farm Infrastructure	
Sub Project RA End State	4.2 Replace Steam Piping – Design issued and construction initiated	Sep-11
Sub Project RA End State	4.5 Replace Plant Air and Instrument Air Piping – Design issued and construction initiated	Sep-11
Sub Project RA End State	4.7 Relocate and install mixer pumps and refurbish tanks for cleaning prior to closure	Sep-10

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Table 4. Major Project-Specific Milestones for Active Projects

	Title/Description	Date
Project RA End State	5.0 Salt Waste Infrastructure Improvements	
Sub Project RA End State	5.2 Saltstone Replacement Equipment – Replace Saltstone Facility air compressor, mixers, vault cameras, and grout pump systems; Procure equipment	Sep-11
Project RA End State	6.0 Sludge Waste Infrastructure Improvements	
Sub Project RA End State	6.1 Tank 13 Mixing, Transfer, Cooling and, Ventilation Systems Installed to Support Sludge Feed Preparation	Sep-11
Sub Project RA End State	6.2 Install Bubblers in DWPF Melter	Sep-11
Sub Project RA End State	6.3a Upgrade support equipment to accommodate DWPF melter bubblers – DWPF Spare Equipment	Sep-11
Sub Project RA End State	6.3b Upgrade support equipment to accommodate DWPF melter bubblers – SEFT to SME Modifications	Sep-11
Sub Project RA End State	6.3c Upgrade support equipment to accommodate DWPF melter bubblers - Alternate Reductant	Sep-11
Sub Project RA End State	7.0 F&H Tank Farm Closure	
Sub Project RA End State	7.1 Tank 18 Isolation – Mechanical and electrical isolation	Sep-11
Sub Project RA End State	7.2 Tank 19 Isolation – Mechanical and electrical isolation	Sep-11
Sub Project RA End State	7.3 Tank 4 Infrastructure Modifications	Aug-10
Sub Project RA End State	7.4 Tank 5 Infrastructure Preparation	Aug-10
Sub Project RA End State	7.5 Tank 6 Infrastructure Preparation	Aug-10
Sub Project RA End State	7.6 Award Procurements for Common Tank Closure Equipment. Procure submersible mixing pump.	Sep-11
Sub Project RA End State	7.7 Chemical Cleaning Infrastructure Unit 1 Train 1 Design – Perform design, place long-lead procurements, and authorize fabrication for Unit 1, Train 1	Sep-11

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Table 4. Major Project-Specific Milestones for Active Projects

	Title/Description	Date
Sub Project RA End State	7.8 Chemical Cleaning Infrastructure F Area Balance of Plant Design, Procurement, and Site Prep – Perform design for chemical cleaning infrastructure improvements for first F Area tank Balance of Plant and initiate long-lead procurements, site preparation, and disassembly and removal	Sep-11
Sub Project RA End State	7.9 Chemical Cleaning Infrastructure Unit 2 Design and Procurement – Perform design for chemical cleaning infrastructure for Unit 2 and initiate long-lead procurements	Sep-11
Sub Project RA End State	7.10 Chemical Cleaning Infrastructure H Area Balance of Plant Design, Procurement, and Site Prep – Perform design for chemical cleaning infrastructure improvements for first H Area tank Balance of Plant and initiate long-lead procurements, site preparation, and disassembly and removal	Sep-11
Project RA End State	8.0 Tank Infrastructure Modifications	
Sub Project RA End State	8.1 Tank 12 Infrastructure Modifications	Aug-10
Sub Project RA End State	8.2a Compliant Tanks - Tank 28 Infrastructure Modifications	Sep-11
Sub Project RA End State	8.2b Compliant Tanks - Tank 37 Infrastructure Modifications	Sep-11
Sub Project RA End State	8.2c Compliant Tanks - Tank 42 Infrastructure Modifications to support 2 nd sludge washing tank design complete and installation initiated; pump procurements initiated	Sep-11
Project RA End State	9.0 Tank Farm Projects to Support SWPF	
Sub Project RA End State	9.1 SDI SPF Tank 50 RTS – Initiate design, award procurement for Balance of Plant engineered equipment, and site prep/tank foundation installation underway; complete Balance of Plant construction and startup	Sep-11

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Table 4. Major Project-Specific Milestones for Active Projects

	Title/Description	Date
Sub Project RA End State	9.2 SDI Blend and Feed Tanks – Design for and award procurement for Balance of Plant engineered equipment; design for Tank 2 and 3; start design for Tank 4; start construction for Tank 1 and 2 and electrical systems; perform tank sampler consolidated hazard analysis and mockup, and support vendor design	Sep-11
Sub Project RA End State	9.3 SDI DWPF Mods – Initiate design and award procurement for Balance of Plant engineered equipment; complete design, initiate long lead procurements, and initiate construction	Sep-11
Sub Project RA End State	9.4 SDI ETP Tank 50 RTS – Design, award tank subcontract, tank subcontractor mobilized, and tank fabrication underway. Award procurement for Balance of Plant engineered equipment, and site prep/tank foundation installation underway; complete Balance of Plant construction; complete startup and initiate readiness assessment	Sep-11
Sub Project RA End State	9.5 RA SAS Recycle Reduction Mods – Design and fabricate jumpers; design and install corridor mods and task ready for outage installation; outage tie-ins, startup, and ready to operate	Sep-11
Project RA End State	10.0 Saltstone Cells	
Sub Project RA End State	10.1 Vault 2 Vault Services and Organic Mods Design – Design for Vault services and organic mods and construction initiated	Sep-11
Project RA End State	11.0 DWPF Operations/Projects	
Sub Project RA End State	11.1 Melter #4 Procurements – Complete vessel/frame, deliver to site and receive; initiate refractory installation 11.1.1 Drain Valve Received 11.1.2 Key Components Received 11.1.3 Film Cooler Received	Sep-11
Sub Project RA End State	11.2a DWPF Enhancements – Design and procurement for DWPF enhancements to support increased throughput; complete design and initiate long lead procurements – RA Dry Frit Addition	Sep-11

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Table 4. Major Project-Specific Milestones for Active Projects

	Title/Description	Date
Sub Project RA End State	11.2b DWPF Enhancements – Design and procurement for DWPF enhancements to support increased throughput complete design and initiate long lead procurements - RA Water Separation from Decon Frit	Sep-11
Project RA End State	12.0 F&H Tank Farm Closure: Technology Development and Risk Mitigation	
Sub Project RA End State	12.1 Enhanced Chemical Cleaning (ECC) Testing and Conceptual Design 12.1.1 RWT Equipment Delivery and Testing 12.1.2 HST Setup and Testing 12.1.3 ECC Unit 1 Train 1 and first F Area tank conceptual design; ECC Unit 2 and first H Area tank conceptual design; perform chemical cleaning testing	Sep-11

NEPA Compliance

All work is performed primarily pursuant to South Carolina Department of Health and Environmental Control's Bureau of Water (industrial wastewater treatment) and Bureau of Land and Waste Management (class 3 landfill) regulations and permits, and the Federal Facility Agreement for the Savannah River Site. NEPA reviews are prepared for the work scopes, which are reviewed and approved by the DOE-SR NEPA Compliance Officer as appropriate.

Project Management

This Recovery Act Project underwent an independent project review (IPR) by EM's Office of Strategic Office of Strategic Planning and Analysis (EM-62). The initial on-site review was conducted during the week of March 1, 2010. The IPR report was issued on April 19, 2010. On June 9, 2010, EM-62 approved the final corrective action plan (CAP). On June 17, 2010 DOE-SR approved the performance baseline. There are no capital asset projects subject to DOE O 413.3A.

Table 5. Delivery Schedule for Capital Asset Projects

Program/OECM Milestone	Delivery (End) Date	Comments
Develop capital asset projects Integrated Project List	NA	NA
Develop Parametric Performance Baseline	NA	NA

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Table 5. Delivery Schedule for Capital Asset Projects

Program/OECM Milestone	Delivery (End) Date	Comments
(Individual Projects)		
If < \$100 M Perform IPR, ≥ \$100 M Perform EIR (Individual Projects)	NA	NA
Approve Performance Baseline	NA	NA
Approve Start of Construction	NA	NA
Approve Project Completion	NA	NA

IV PERFORMANCE

Performance Measures

The following is the summary of the project milestones and performance measures for identified projects and subprojects for the work scope to be completed using Recovery Act funding.

Table 6. Performance Milestones and Performance Measures

	Other Major Program-Specific Milestones	Date	Performance Measures
Project RA End State	1.0 Safety Improvements		
Sub Project RA End State	1.1 Design, procure, and install accountability system	Sep-11	Personnel accountability system installed and operational.
Sub Project RA End State	1.2 Install system to divert surface water for sufficient drainage	Sep-11	Drain water system for surface water management installed and operational.
Project RA End State	2.0 SWPF Integration - Tank/Farm Infrastructure for Feed/Product Readiness		
Sub Project RA End State	2.1 Design and purchase salt blend mixer pumps	Sep-11	Design salt blend pumps, four pumps vendor tested, site tested and accepted.
Sub Project RA End State	2.2 Purchase replacement mixer pumps – Procurement and fabrication of four quad volute pumps	Sep-11	Four pumps vendor-tested and received.

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Table 6. Performance Milestones and Performance Measures

	Other Major Program-Specific Milestones	Date	Performance Measures
Sub Project RA End State	2.4 Radiation shielding for waste processing tank	Sep-11	Disposal box purchased, shielding plugs fabricated and staged for installation. Shielding designed and installed for the transfer line from Riser B5 to valve box.
Sub Project RA End State	2.5a Design and Install Chemical Addition and Transfer Process Piping – RA Blend Tanks Chemical Addition Piping	Sep-11	Chemical addition piping designs issued and construction complete on header to SWPF Blend and Feed Tank(s).
Sub Project RA End State	2.5b Design and Install Chemical Addition and Transfer Process Piping – RA SDI SWPF Transfer Line Tie-Ins	Sep-11	Design for transfer line tie-ins to SWPF issued.
Sub Project RA End State	2.6 Enhance Saltstone Facility Waste Feed Storage Capability	Sep-11	Specification, procurement and fabrication of new waste receipt tanks complete.
Sub Project RA End State	2.7 Increase Nitrogen Tank Capacity at DWPF	Sep-11	Specification, procurement, and fabrication of larger capacity nitrogen tank and associated concrete pad complete.
Project RA End State	3.0 DWPF Infrastructure		
Sub Project RA End State	3.1 Refurbish Cooling Tower – Procure and install cooling tower	Sep-11	Cooling tower refurbished and operational.
Sub Project RA End State	3.2 Replace Argon Tank	Sep-11	New argon tank installed and operational.
Sub Project RA End State	3.5 Purchase manipulators – Procurement and fabrication of two electro-mechanical manipulators	Sep-11	Replacement of two electro-mechanical manipulators received and tested.

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Table 6. Performance Milestones and Performance Measures

	Other Major Program-Specific Milestones	Date	Performance Measures
Sub Project RA End State	3.6 Purchase melter bellows – Procure bellows	Sep-11	Replacement bellows vendor-tested and received.
Project RA End State	4.0 Tank Farm Infrastructure		
Sub Project RA End State	4.2 Replace steam piping - Design issued and construction initiated	Sep-11	Construction initiated for new utility systems piping for steam systems.
Sub Project RA End State	4.5 Replace plant and instrument air piping - Design issued and construction initiated	Sep-11	Construction initiated for utility systems piping for air systems.
Sub Project RA End State	4.7 Relocate and install mixer pumps and refurbish tanks for cleaning prior to closure	Sep-10	Tank 5 purge ventilation refurbished and submersible mixer pump replaced.
Project RA End State	5.0 Salt Waste Infrastructure Improvements		
Sub Project RA End State	5.2 Replace Saltstone Facility air compressor, mixers, vault cameras, and grout pump systems; Procure equipment	Sep-11	Air compressors, mixer, vault cameras, and CCBT pump vendor-tested and received.
Project RA End State	6.0 Sludge Waste Infrastructure Improvements		
Sub Project RA End State	6.1 Tank 13 Mixing, Transfer, Cooling, and Ventilation Systems Installed to Support Sludge Feed Preparation	Sep-11	Mixing, transfer, cooling, and ventilation systems installed and construction turnover complete.
Sub Project RA End State	6.2 Install Bubblers in DWPF Melter	Sep-11	Receive two sets of bubblers and melter bubblers are installed and operational.

Project Operating Plan for Savannah River Site Liquid Waste Infrastructure Recovery Act Project

Table 6. Performance Milestones and Performance Measures

	Other Major Program-Specific Milestones	Date	Performance Measures
Sub Project RA End State	6.3a Upgrade support equipment to accommodate DWPF melter bubblers – DWPF Spare Equipment	Sep-11	Spare equipment received.
Sub Project RA End State	6.3b Upgrade support equipment to accommodate DWPF melter bubblers – SEFT to SME Modifications	Sep-11	Slurry mix evaporator (SME) system enhancements pre-outage scope complete.
Sub Project RA End State	6.3c Upgrade support equipment to accommodate DWPF melter bubblers – Alternate Reductant	Sep-11	Alternate reductant conceptual study complete.
Project RA End State	7.0 F&H Tank Farm Closure		
Sub Project RA End State	7.1 Tank 18 Isolation	Sep-11	Obtain sample and mechanical and electrical tank isolation.
Sub Project RA End State	7.2 Tank 19 Isolation	Sep-11	Obtain sample and mechanical and electrical tank isolation.
Sub Project RA End State	7.3 Tank 4 Infrastructure Modifications	Aug-10	Design for 3 rd submersible mixing pump, riser preparation, and D&R completed and ready to receive SMP. Install Rapid Tank Flow Mods. Replace failed submersible transfer pump.
Sub Project RA End State	7.4 Tank 5 Infrastructure Preparation	Aug-10	Installation of liquid addition modifications; sample tooling fabrication; samples obtained; process sampling complete. MOP design complete, equipment fabricated, mockup built, and field testing initiated.

Project Operating Plan for Savannah River Site Liquid Waste Infrastructure Recovery Act Project

Table 6. Performance Milestones and Performance Measures

	Other Major Program-Specific Milestones	Date	Performance Measures
Sub Project RA End State	7.5 Tank 6 Infrastructure Preparation	Aug-10	Install 3rd submersible mixing pump; installation of liquid addition modifications; relocate submersible mixing pump from Tank 5 to Tank 6; sampling tooling fabrication.
Sub Project RA End State	7.6 Award Procurements for Common Tank Closure Equipment; Procure submersible mixing pump	Sep-11	Develop specification and award procurements for 3 submersible mixing pumps, 1 electrical equipment skid, and 1 submersible transfer pump to support tank closures. Procure 1 additional submersible mixing pump.
Sub Project RA End State	7.7 Chemical Cleaning Infrastructure Unit 1 Train 1 Design and Procurement	Sep-11	Perform design, place long-lead procurements, and authorize fabrication for Unit 1, Train 1.
Sub Project RA End State	7.8 Chemical Cleaning Infrastructure First F Area Tank Balance of Plant Design, Procurement, Site Prep, and D&R	Sep-11	Perform design for chemical cleaning infrastructure improvements for first F Area tank Balance of Plant. Initiate long-lead procurements, site preparations, and disassembly and removal.
Sub Project RA End State	7.9 Chemical Cleaning Infrastructure Unit 2 Design and Procurement	Sep-11	Perform design for chemical cleaning infrastructure for Unit 2. Initiate long-lead procurements.
Sub Project RA End State	7.10 Chemical Cleaning Infrastructure First H Area Tank Balance of Plant Design, Procurement, Site Prep, and D&R	Sep-11	Perform design for chemical cleaning infrastructure improvements for first H Area tank Balance of Plant. Initiate long-lead procurements, site preparations, and disassembly and removal.
Project RA End State	8.0 Tank Infrastructure Modifications		
Sub Project RA End State	8.1 Tank 12 Infrastructure Modifications	Aug-10	First sludge transfer complete.

Project Operating Plan for Savannah River Site Liquid Waste Infrastructure Recovery Act Project

Table 6. Performance Milestones and Performance Measures

	Other Major Program-Specific Milestones	Date	Performance Measures
Sub Project RA End State	8.2a Compliant Tanks - Tank 28 Infrastructure Modifications	Sep-11	Tank 28 modifications complete.
Sub Project RA End State	8.2b Compliant Tanks - Tank 37 Infrastructure Modifications	Sep-11	Tank 37 modifications complete.
Sub Project RA End State	8.2c Compliant Tanks - Tank 42 Infrastructure Modifications	Sep-11	Tank 42 infrastructure mods to support 2 nd sludge washing tank design complete and installation initiated. Pump procurements initiated.
Project RA End State	9.0 Tank Farm Projects to Support SWPF		
Sub Project RA End State	9.1 SDI SPF Tank 50 RTS – Initiate design, award procurement for Balance of Plant engineered equipment, and site prep/tank foundation installation underway	Sep-11	Initiate design. Award procurement for Balance of Plant engineered equipment. Site prep/tank foundation installation underway. Complete Balance of Plant construction and startup.
Sub Project RA End State	9.2 SDI Blend and Feed Tanks – Design for and award procurement for Balance of Plant engineered equipment	Sep-11	Complete design for one tank, initiate design for a second tank, and award procurement for Balance of Plant engineered equipment. Design for Tank 2 and 3; start design for Tank 4; start construction for Tank 1 and 2 and electrical systems. Perform tank sampler consolidated hazard analysis, mockup, and support vendor design.
Sub Project RA End State	9.3 SDI DWPF Mods – Initiate design and award procurement for Balance of Plant engineered equipment	Sep-11	Initiate design. Award procurement for Balance of Plant engineered equipment. Complete design, initiate long lead procurements, and initiate construction.

Project Operating Plan for Savannah River Site Liquid Waste Infrastructure Recovery Act Project

Table 6. Performance Milestones and Performance Measures

	Other Major Program-Specific Milestones	Date	Performance Measures
Sub Project RA End State	9.4 SDI ETP Tank 50 RTS – Design, award tank subcontract, tank subcontractor mobilized, and tank fabrication underway. Award procurement for Balance of Plant engineered equipment, and site prep/tank foundation installation underway.	Sep-11	Complete design; Award Tank subcontract; tank contractor mobilized, and tank fabrication underway. Award procurement for Balance of Plant engineered equipment. Site prep/tank foundation installation underway. Complete Balance of Plant construction; complete startup and initiate readiness assessment.
Sub Project RA End State	9.5 RA SAS Recycle Reduction Mods – Design and procurement for DWPF enhancements to support increased throughput	Sep-11	Design and fabricate jumpers; design and install corridor modifications; and task ready for outage installation, outage tie-ins, startup, and ready to operate. Supports 6.3 scope item.
Project RA End State	10.0 Saltstone Cells		
Sub Project RA End State	10.1 Vault 2 Services and Organic Mods Design	Sep-11	Design for Vault services and organic mods and construction initiated.
Project RA End State	11.0 DWPF Operations/Projects		
Sub Project RA End State	11.1 Melter #4 Procurements	Sep-11	Complete vessel/frame, deliver to site, and receive. Initiate refractory installation. Drain Valve – Complete vendor fabrication, assembly, deliver to site, and receive. Key Components – Complete vendor fabrication, assembly, deliver to site, and receive. Film Coolers - Complete fabrication and receive

Project Operating Plan for Savannah River Site Liquid Waste Infrastructure Recovery Act Project

Table 6. Performance Milestones and Performance Measures

	Other Major Program-Specific Milestones	Date	Performance Measures
Sub Project RA End State	11.2a DWPF Enhancements – Design and procurement for DWPF enhancements to support increased throughput – Dry Frit Addition	Sep-11	Perform feasibility test and issue procurement specification to support increased DWPF throughput. Complete design and initiate long lead procurements. Support 6.3 scope.
Sub Project RA End State	11.2b DWPF Enhancements – Design and procurement for DWPF enhancements to support increased throughput – Water Separation from Decon Frit	Sep-11	Obtain frit sample, lab analysis of frit sample, water separation technology down select and perform feasibility testing to support increased DWPF throughput. Complete design and initiate long-lead procurements.
Project RA End State	12.0 F&H Tank Farm Closure: Technology Development and Risk Mitigation		
Sub Project RA End State	12.1 ECC Testing and Revised Conceptual Design	Sep-11	<ul style="list-style-type: none"> - Complete Real Waste Test (RWT) equipment delivery and testing - Complete Hazardous Simulant Test (HST) - Complete ECC Unit 1 and first F Area tank conceptual design - Complete ECC Unit 2 and first H Area tank conceptual design - Perform chemical cleaning testing

Table 7. Overall ARRA Project Performance Targets

Recovery Act Project Identification Code	Savannah River Site Liquid Waste Recovery Act Project 2002290
Linkage To S-1 Priorities	National Security and Legacy - Accelerates readiness to safely transfer wastes for treatment and disposal

Project Operating Plan for Savannah River Site Liquid Waste Infrastructure Recovery Act Project

Table 7. Overall ARRA Project Performance Targets

Recovery Act Project Identification Code	Savannah River Site Liquid Waste Recovery Act Project 2002290
Linkage to Current Program Goal (if applicable)	To safely disposition large volumes of nuclear waste; safeguard materials that could be used in nuclear weapons; EM is fulfilling its commitments to reduce overall risk and complete cleanup across all sites for generations to come.
Two-Year Outcome-Oriented Performance Measure	Complete project planning and design for Liquid Waste Recovery Act Projects to support waste feed to SWPF: Complete installation and acceptance of tank farm and DWPF facility, systems and equipment replacements and modifications.
Q3 - Project-Level Quarterly Performance Milestone(s)	N/A
Q4 - Project-Level Quarterly Performance Milestone(s)	N/A
Second Year Performance Target (FY2010)	Execution of project design work; execution of procurement activities for tank farm, SWPF, and DWPF equipment projects (e.g., long-lead procurements for pumps, tanks, etc.).
Q1 - Project-Level Quarterly Performance Milestone(s)	N/A
Q2 - Project-Level Quarterly Performance Milestone(s)	N/A
Q3 - Project-Level Quarterly Performance Milestone(s)	2.0 SWPF Integration - Tank/Farm Infrastructure for Feed/Product Readiness - Complete procurement award for mixer pumps May-10
Q4 - Project-Level Quarterly Performance Milestone(s)	2.0 SWPF Integration - Tank/Farm Infrastructure for Feed/Product Readiness - Complete procurement award for Larger Capacity Nitrogen Tank Aug-10 2.0 SWPF Integration - Tank/Farm Infrastructure for Feed/Product Readiness - Complete Larger Capacity Nitrogen Tank tie-in design July-10 2.0 SWPF Integration - Tank/Farm Infrastructure for Feed/Product Readiness - Complete chemical addition system design Sep-10

Project Operating Plan for Savannah River Site Liquid Waste Infrastructure Recovery Act Project

Table 7. Overall ARRA Project Performance Targets

Recovery Act Project Identification Code	Savannah River Site Liquid Waste Recovery Act Project 2002290
	<p>2.0 SWPF Integration - Tank/Farm Infrastructure for Feed/Product Readiness - Complete chemical addition system D&R Sep-10</p> <p>3.0 DWPF Infrastructure - Complete Replacement Argon Tank planning, material delivery and job preparation Sep-10</p> <p>6.0 Sludge Waste Infrastructure Improvements - Complete Tank 13 Mixing, Transfer, Cooling and Ventilation Systems planning, material delivery and job preparation Sep-10</p> <p>7.0 F&H Tank Farm Closure – Tank 4 Infrastructure Modifications - Design, preparation, and D&R for SMP installation complete Aug-10</p> <p>7.0 F&H Tank Farm Closure – Tank 5 Infrastructure Preparation - Liquid addition modifications complete Aug-10</p> <p>7.0 F&H Tank Farm Closure – Tank 6 Infrastructure Preparation - Liquid addition modifications complete Aug-10</p> <p>7.0 F&H Tank Farm Closure – Award Procurements for Common Tank Closure Equipment – Complete Sep-10</p> <p>8.0 Tank Infrastructure Improvements – Tank 12 Infrastructure Modifications – First sludge transfer complete Jul-10</p> <p>8.0 Tank Infrastructure Modifications - Compliant Tanks - Tank 37 Infrastructure Modifications – Complete Sep-10</p> <p>9.0 Tank Farm Projects to Support SWPF – SDI SPF Tank 50 RTS – Initiate design, award procurement for Balance of Plant engineered equipment, and site prep/tank foundation installation underway - Complete Sep-10</p>

Project Operating Plan for Savannah River Site Liquid Waste Infrastructure Recovery Act Project

Table 7. Overall ARRA Project Performance Targets

Recovery Act Project Identification Code	Savannah River Site Liquid Waste Recovery Act Project 2002290
	<p>9.0 Tank Farm Projects to Support SWPF – SDI Blend and Feed Tanks – Design for and award procurement for Balance of Plant engineered equipment - Complete Sep-10</p> <p>9.0 Tank Farm Projects to Support SWPF – SDI DWPF Mods – Initiate design and award procurement for Balance of Plant engineered equipment - Complete Sep-10</p> <p>9.0 Tank Farm Projects to Support SWPF – SDI ETP Tank 50 RTS – Design, award tank subcontract, tank subcontractor mobilized, and tank fabrication underway. Award procurement for Balance of Plant engineered equipment, and site prep/tank foundation installation underway - Complete Sep-10</p> <p>9.0 Tank Farm Projects to Support SWPF - SAS Recycle Reduction Mods – Design and fabricate jumpers; design and install corridor mods and task ready for outage installation Sep-10</p> <p>11.0 DWPF Operations/Projects - DWPF Enhancements – Design and procurement for DWPF enhancements to support increased throughput – Complete Sep-10</p> <p>12.0 F&H Tank Farm Closure: Technology Development and Risk Mitigation – Enhanced Chemical Cleaning (ECC) Conceptual Design – Complete Sep-10</p>
Third Year Performance Target (FY2011)	Execution of project design work; execution of procurement activities for tank farm, SWPF, and DWPF equipment projects (e.g., long-lead procurements for pumps, tanks, etc.).
Q1 - Project-Level Quarterly Performance Milestone(s)	N/A
Q2 - Project-Level Quarterly Performance Milestone(s)	N/A
Q3 - Project-Level Quarterly Performance Milestone(s)	N/A

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Table 7. Overall ARRA Project Performance Targets

Recovery Act Project Identification Code	Savannah River Site Liquid Waste Recovery Act Project 2002290
Q4 - Project-Level Quarterly Performance Milestone(s) (continued)	N/A

National Strategic Benefits

Table 8. National Strategic Benefits

1. Carbon Emission Reductions: Estimated 5-year undiscounted CO ₂ reductions (in metric tonnes of CO ₂ equivalent) are not applicable.
2. Oil Consumption Reductions: Estimated 5-year reduction in undiscounted oil consumption (in barrels of oil equivalent) is not applicable.

V MANAGEMENT

Table 9 depicts the linkages between short term (5 year) qualitative and quantitative benefit estimates and the Secretarial-level Priorities through September 2014

Table 9. Secretary's Priorities

Secretary's Priorities	Project Impacts (Qualitative)	Project Impacts (Quantitative)
Science and Discovery	NA	NA
Clean, Secure Energy	NA	NA
Economic Prosperity	Improves economic conditions in the Central Savannah River Area (CSRA), South Carolina, Eastern Georgia and the Southeast	
National Security and Legacy	Accelerates readiness to safely transfer wastes for treatment and disposal	2-year acceleration of projects required to support waste transfers
Climate Change	NA	NA

Collaboration and Coordination

Several of the proposed RA-funded projects are linked to science and technology projects funded through the Department of Energy's Office of Science and EM-20. In turn, these projects have significant collaboration with national laboratories, federal agencies and universities. For example, the DWPF Sludge Treatment Projects (6.2) are collaborating

Project Operating Plan for Savannah River Site Liquid Waste Infrastructure Recovery Act Project

with the Catholic University of America and the Waste Treatment and Immobilization Plant Project (WTP) in developing, testing and deploying the melter enhancements.

Federal Infrastructure Investments

The investment accelerates upgrades that will support the efficient operation of the Salt Waste Processing Facility.

Line Management

SR has implemented an Integrated Safety Management System (ISMS) approach to ensure work is performed safely and efficiently. This approach is formalized by using management systems to execute the guiding DOE principles and core safety management functions to protect the public, workers, and environment.

In addition, SR has developed a Project Execution Plan (PEP) which describes how SR manages the Savannah River Liquid Waste Project, including its approach and expectations in accordance with DOE O 413.3A, *Program and Project Management for the Acquisition of Capital Assets*.

Additionally SR and its contractors and subcontractors are responsible and accountable for efficient and effective use of government funds, including those appropriated through the Recovery Act. This accountability and responsibility includes, but is not limited to, conducting regularly scheduled management review meetings, providing regular project status and financial reporting, and monitoring accomplishments through metrics and performance analysis augmenting the Recovery Act transparency and reporting requirements.

Each entity is responsible for reviewing, analyzing, and self-assuring their own processes and use of funds to ensure that reported data are accurate and reliable and that critical milestones are achieved. SR takes the responsibilities associated with management of Recovery Act funding seriously. Therefore, independent assessments will be scheduled, performed, reported, and monitored to ensure that the goals and objectives established through the Recovery Act are met.

Needs from Staff Offices

DOE-SR has not identified resource needs from other DOE Staff Offices.

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Human Capital

To effectively manage the Tank Farm Infrastructure Recovery Act Project, 2-3 Level 1 Federal Project Directors are required, and will work under the oversight of higher level federal project directors. All three Federal positions will be located at the Liquid Waste Project Office, Savannah River.

Additionally, SR intends to use support service contractors to provide limited augmentation to federal staff in the areas of budget and finance, cost estimating, and technical oversight.

Table 10. Information on Hiring Under the Recovery Act

# & Type of Positions (Title, Series and Grade)	Location (HQ or Field – w/location)	Federal or Contractor	Timeframe (1-6mos; 6+mos; other; specify date needed if possible)
A wide variety of skills, trades and professions.	SRS	Contractor	September 2009 through September 2011

Procurement

The Liquid Waste Program Contract No. DE-AC09-09SR22505, US Department of Energy (DOE), Savannah River, is in place. Interface agreements are also in place between DOE-SR, the DOE-SR M&O Contractor Savannah River Nuclear Solutions, LLC (SRNS) and the DOE-SR Liquid Waste Contractor Savannah River Remediation, LLC (SRR) for shared services.

The overall purpose of this Contract remains to furnish safe, compliant, cost-effective and energy-efficient services to further the DOE-SR mission to store, retrieve, and treat Savannah River tank waste, store and dispose of treated waste, and to close the Tank Farm waste management areas to protect the environment. The Contractor has the responsibility for determining the specific methods and approaches for accomplishing all work. This Contract applies performance-based contracting approaches; expects the Contractor to innovate and implement techniques that maximize performance efficiencies and scope completion and minimizes the description of how to accomplish the scope of work.

The original scope and purpose of this Contract will not change with the addition of the Recovery Act Funds. The Recovery Act funds will allow the Contractor to accelerate infrastructure work in support of liquid system operations and in preparation for tank closure activities.

Subcontracts and purchase orders that were awarded and ARRA funded prior to the date of this modification will remain ARRA funded through acceptable completion of the service or delivery of the material.

Project Operating Plan for Savannah River Site Liquid Waste Infrastructure Recovery Act Project

Table 11. Procurement Plans

Activity	Type	New/ Exist (N/E)	Changes (E), Needs (N)	Status	Expected Complete	Issues (Y/N)
Savannah River Remediation (SRR) Liquid Waste Contract	DOE Prime Contract	E	(E) Funding Modification	Complete	Modification 015 approved 11/18/2009	N
Melter Bubbler Design	SRR Subcontract	N	NA	Complete	October 2009	N
Melter Bubbler Fabrication	SRR Subcontract	N	NA	Complete	October 2009	N
Staff Augmentation	SRR Subcontract	N	NA	Contracts Placed	As Needed	N
Enhanced Chemical Cleaning Design	SRR Subcontract	N	NA	Complete	January 2010	N
Real Waste Test Equipment (ECC)	SRR Subcontract	N	NA	Complete	January 2010	N
Tank 13 Submersible Transfer Pumps (STP)	SRR Subcontract	N	NA	Complete	April 2010	N
Hazardous Stimulant Test (ECC)	SRR Subcontract	N	NA	Complete	April 2010	N
Tank 13 Submersible Mixer Pumps (SMP)	SRR Subcontract	N	NA	Complete	May 2010	N
Blend & Feed Tank Submersible Blender Pumps (SBP)	SRR Subcontract	N	NA	Complete	May 2010	N
Saltstone and ETP Storage Tanks Design & Fabrication	SRR Subcontract	N	NA	Complete	June 2010	N